CHAPTER 7

TREND FACTORS

7-1 Trend Factor - General Principles

The trend factor is a statistical measure of the change in the costs of goods and services purchased by long term care facilities during the course of one year. The intent of the trend factor is to provide the Division of Medicaid with insight into the amount and nature of change of health care costs experienced by long term care providers.

7-2 Trend Factor Computation

A trend factor will be computed each year for long term care facilities and will be used in the calculation of the base rates effective for the rate year, January 1 through December 31. A separate trend factor will be calculated for direct care costs and care related costs and for administrative and operating costs. These trend factors will be computed as described below.

Cost Reports Used in the Calculation of the Trend Factors Α. Cost reports used in the computation of the trend factors are as described below.

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- Facilities which have at least eighty percent (80%) occupancy.
- Facilities which are in operation a full twelve 2. (12) months. Facilities which have undergone a change of ownership will be used if the facility was open at least twelve (12) months under both the buyer's and seller's periods of operations combined. The costs from all cost reports in the standard reporting year will be used in the computation.
- 3. Nursing facilities which either certify additional beds or decertify beds that results in a change in classification (either Small Nursing Facility to Large Nursing Facility or vice versa) as long as the facility was in operation at least twelve (12) months under both classifications combined. The costs from all cost reports in the standard reporting year will be used in the computation.
- Nursing facilities which use the cost report line(s) for allocated costs will not be used.

B. Computation of the Trend Factors

The following steps will be taken to compute the trend factors for direct care costs, therapies, care related costs and administrative and operating costs.

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- Separate the costs into the following cost categories as defined in the cost report form:
 - a. Direct Care Expenses (Form 6, Section 1)
 - b. Therapies (Form 6, Section 2)
 - c. Care Related Expenses (Form 6, Section 3)
 - d. Administrative and Operating Costs (Form 6, Section 4)
- 2. Determine the relative weight of each of the line items in each category. A trend factor will not be developed for property costs because the value of each nursing facility bed will be indexed using the RS Means Construction Index for use in the fair rental reimbursement computation.
- 3. Obtain the market basket of economic indicators. An example of this market basket follows Section 7-4 of this plan.
- 4. The economic indicators for each line item of cost will be multiplied by the relative weight of the Form 6 line items in order to determine the trend factor for each line item. An example of the computation of the trend factors, using weighted

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- averages, follows Section 7-4 and the market basket example of this plan.
- 5. Add the line item trend factors determined in (4) above for each cost category. The result will be the trend factor for each of the cost categories.
- 6. The forecasted trend factor for each of the cost centers may be adjusted due to the following:
 - a. Known increases or decreases in costs due to federal or state laws or regulations, or
 - b. Other factors that can be reasonably forecasted to have a material effect on costs in the prospective year.

7-3 <u>Trend Factors - Nursing Facilities</u>

Two (2) trend factors will be used in computing the base rates for nursing facilities. A direct care and care related costs trend factor will be determined by combining the trend factors determined for each of these cost centers in Section 7-2, above. The total Direct Care and Care Related Trend Factor will be computed by weighting the total allowable costs in each of the cost centers to the total in the two (2) cost centers. The percent of each to the total costs will be multiplied by trend factors for the individual trend factors determined in Section 7-2, above.

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NURSING FACILITY TREND FACTORS - FY 1994

| COST CENTER | ALLOWABLE COSTS | TREND FACTOR | % OF TOTAL COSTS | ADJUSTED TREND FACTOR |
|---|-----------------------------|-----------------|------------------------|-----------------------------|
| Direct Care Care Related | \$151,656,411 59,525,200 | 5.24% 3.83% | 71.81% 28.19% | 3.76% 1.08% |
| DC/CR Trend Factor | \$211,181,611 | | 100.00% | 4.84% |
| Administrative and Operating Trend Factor | \$124,266,829 | 4.21% | 100.00% | 4.21% |

For example: The trend factor for direct care costs was determined to be 3.76% and the trend factor for care related costs 1.08% in the example of the trend factor computation following Section 7-4 as computed in accordance with Section 7-2, above. The total allowable costs for these cost centers was \$151,656,411 for direct care costs and \$59,525,200 for care related costs for a total of \$211,181,611. Direct care costs made up 71.81% and care related costs amounted to 28.19% of the total for these two cost centers. Accordingly, the trend factor for direct care costs were multiplied by 71.81% and the trend factor for care related costs were multiplied by 28.19% in order to compute the Direct Care and Care Related Costs Trend Factor. The result in the example is (5.24% X

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71.81%) + (3.83% X 28.19%) = 4.84% direct care and care related trend factor. The administrative and operating trend factor in the example is 4.21%.

7-4 Trend Factor - PRTF's and ICF-MR's

One (1) trend factor will be used in computing the rates for PRTF's and ICF-MR's. A trend factor will be determined by combining the trend factors determined for each of these cost centers in Section 7-2, above. The PRTF and ICF-MR trend factor will be computed by weighting the total allowable costs in each of the cost centers to the total in the four (4) cost centers. The percent of each to the total costs will be multiplied by trend factors for the individual trend factors determined in Section 7-2, above. For example:

| | Allowable | Trend | % of Total | Adjusted |
|--------------|---------------|--------|------------|--------------|
| Cost Center | Costs | Factor | Costs | Trend Factor |
| Direct Care | \$151,656,411 | 5.24% | 44.75% | 2.34% |
| Therapies | 3,483,412 | 5.16% | 1.03% | 0.05% |
| Care Related | 59,525,200 | 3.83% | 17.56% | 0.67% |
| Admin./Oper. | 124,266,829 | 4.21% | 36.66% | 1.54% |
| | | | | |
| Total | \$383,931,852 | | 100.00% | 4.60% |

In this example the PRTF and ICF-MR Trend Factor would be 4.60%.

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| Reimbursable cost components | (To be determined by Division of Medicaid) | | 1 | ; |
| Other colories and wages | Change, avg. weekly wage, skilled nursing facilities | 113.9 | 0./17 | <u> </u> |
| Outer salares are reger Fringe benefits | Change in employees FICA rate compounded by salary | 124.9 | 129.0 | 133 |
| Unemployment taxes | rate change Change, weighted avg of unemployment tax rates compounded paid by health service employers compounded by changes | 9 | 1 | 2 |
| Pension plan | in the tax rate base Change in employees' rate, MPFRS, compounded by salary rate changes | 120.7 | 124.7 | 126 |
| Workers' compensation | Change in assigned rate for nursing home industry compounded with salary rate changes | 111.8 | 115.5 | 119 |
| Group health insurance | CPI Medical care | 113.4 | | 122 |
| Uniforms | (PI Apparel continuodities | 121.9 | 129.0 | 13 |
| Fringe benefits Food cost | CPI – Food and beverages | 117.9 | 124.9 | 13 |
| Semivariable costs:blding occupancy Repair & maintenance of buildings | CPI Housing, maintenance, and repair | 114.0 | 118.0 | 12, |
| Other occupancy costs: repairs, furniture maintenance, factures, equipment Other Property and liability insurance | CPI Housekeeping services CPI All items less food and energy CPI Housing, financing, taxes, insurance | 115.0 121.9 NA | 117.3 129.0 | 5 E |
| Property taxes | CPI Property taxes | ¥ Z | ΨZ • | |
| Other variable costs Medical supplies Linens Housekeeping/dietary supplies Utilities Legal, accounting, consultants, etc All other variable costs | CPI — Medical care commodities CPI — Textile house furnishings CPI — Tousekeeping supplies CPI — Fuel and other utilities CPI — Personal and educational services CPI — All items less food and energy | 139.0 115.0 115.1 104.1 127.7 | 150.8 115.6 120.9 107.8 158.3 | 11 12 11 11 11 13 |

| 1988 | 6861 | 1990 | 1991 | 1992 | 88-89 | 06-68 | 90-91 | 91-92 | 88-92 |
|-------------|-------------|--------|-------|----------|----------|---------------|---------------|-------|----------|
| 113.9 | 117.6 | 119.4 | 123.4 | 129.8 | 3.2% | 1.5% | 3.4% | 5.2% | 14 0% |
| 124.9 | 129.0 | 133.4 | 138.4 | 145.6 | 3.3% | 3.4% | 3.7% | 5 2% | 166% |
| 26.3 | ¥ Z | ¥ | ¥ | ď Z | ¥ Z | ∢ 2 | ∀ Z | Y Y | NA |
| 120.7 | 124.7 | 126.6 | 131.3 | 138.1 | 3.3% | 1.5% | 3.7% | 5 2% | 14 4% |
| ; | 1 | • | 103.8 | 129.8 | | 3.4% | 3 7% | 4.8% | 16 1% |
| 111.8 | 115.5 | 2 0 0 | 177.0 | 190 | | %0.6 | 8.7% | 7 4% | 368% |
| 139.0 | 149.3 | 0.201 | 106.4 | 129.4 | 5 9% | 4.5% | 3.6% | 2 4% | 14 1% |
| 113.4 | 1.00.4 | 135.5 | 139.6 | 144.7 | | 5.0% | 30% | 3 7% | 18 7% |
| 117.9 | 124.9 | 132.9 | 136.5 | 138.3 | | 6.4% | 2.7% | 1 3% | 17 3% |
| 114.0 | 118.0 | 122.2 | 127.8 | 129.9 | 3.5% | 3.6% | 4.6% | 16% | 13 9% |
| ! | , | | 000 | 1337 | % | 2.4% | 7 4% | 36% | 16 3% |
| 115.0 | 117.3 | | 0.62 | 7 7 7 7 | | 22 % | 30% | 3.7% | 18 7% |
| 121.9 NA | 129.0 NA | NA NA | | AZ AZ | | Y Y | ¥ Ž | ΑN | Y Z |
| Y Y | A A | ¥ Z | Z | N A | NA AN | N V | N A | ž | X |
| 000 | 150 B | 163.4 | 176.8 | 1881 | 8 5% | 8 4% | 8 2% | 6.4% | 35 3% |
| 0.00 | | • | 119.8 | 121.4 | | | 5 0% | 1 3% | 56% |
| 15.0 | | | 129.4 | 130.2 | | 3.6% | | %90 | 13.1% |
| 104 | | | | 117.5 | 36% | 3.5% | | 2 3% | 12 9% |
| 1.47.7 | 1583 | 170.4 | 182.2 | 194.9 | | | | 7 0% | 35 0% |
| 121.9 | 129.0 | | | 144 7 | 5.8% | 2.0% | 30% | 3 7% | 18 7% |
| - | | | | | | | | | |

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| COST CENTER | LINE ITEM COST | PERCENTAGE OF COST CENTER | TREND FACTOR | WEIGHTED TREND FACTOR |
|---|----------------------|--|-----------------|-----------------------------|
| Direct Care Costs | | | | |
| Line 1-01, Salaries-Aides | \$68,546,653 | 45.20% | 5.20% | 2.35% |
| Line 1-02, Salaries-LPN's | 36,384,834 | 23.99% | 5.20% | 1.25% |
| Line 1-03, Salaries-RN's | 13,398,945 | 8.84% | 5.20% | 0.46% |
| Line 1-04, FICA Taxes-Direct Care | 9,023,749 | 5.95% | 5.20% | 0.31% |
| Line 1-05, Group Health-Direct Care | 5,047,034 | 3.33% | 7.40% | 0.25% |
| Line 1-06, Pension Plan-Direct Care | 2,180,362 | 1.44% | 5.20% | 0.07% |
| Line 1-07, Unemployment Taxes-Direct Care | 975,645 | 0.64% | 3.70% | 0.02% |
| Line 1-08, Uniforms-Direct Care | 241,651 | 0.16% | 2.40% | 0.00% |
| Line 1-09, Workmen's Comp-Direct Care | 5,547,021 | 3.66% | 4.80% | 0.18% |
| Line 1-10, Contract-Aides | 2,628,769 | 1.73% | 5.20% | 0.09% |
| Line 1-11, Contract-LPN's | 317,472 | 0.21% | 5.20% | 0.01% |
| Line 1-12, Contract-RN's | 124,409 | 0.08% | 5.20% | 0.00% |
| Line 1-13, Medical Supplies | 4262996 | 2.81% | 6.40% | 0.18% |
| Line 1-14, Other Supplies-Direct Care | 2,976,871 | 1.96% | 3.70% | 0.07% |
| Total Direct Care Costs | \$151,656,411 | 100.00% | | 5.24% |
| Therapy Costs | | | | |
| Line 2-01, Salaries-Occupational Therapists | \$596,011 | 17.11% | 5.20% | 0.89% |
| Line 2-02, Salaries-Physical Therapists | 340,140 | 9.76% | 5.20% | 0.51% |
| Line 2-03, Salaries-Speech Therapists | 607,949 | 17.45% | 5.20% | 0.91% |
| Line 2-04, Salaries-Other Therapists | 392,258 | 11.26% | 5.20% | 0.59% |
| Line 2-05, FICA Taxes-Therapies | 102,082 | 2.93% | 5.20% | 0.15% |
| Line 2-06, Group Health-Therapies | 103,436 | 2.97% | 7.40% | 0.22% |
| Line 2-07, Pensions-Therapies | 71,956 | 2.07% | 5.20% | 0.11% |
| Line 2-08, Unemployment Taxes-Therapies | 6,891 | 0.20% | 3.70% | 0.01% |
| Line 2-09, Uniform Allowance-Therapies | (7) | -0.00% | 2.40% | 0.00% |
| Line 2-10, Workmen's Comp-Therapies | 32,809 | 0.94% | 4.80% | 0.05% |
| Line 2-11, Contract-Occupational Therapists | 228,538 | 6.56% | 5.20% | 0.34% |
| Line 2-12, Contract-Physical Therapists | 169,280 | 4.86% | 5.20% | 0.25% |
| Line 2-13, Contract-Speech Therapists | 279,193 | | 5.20% | 0.42% |
| Line 2-14, Contract—Other Therapists | 290,737 | | 5.20% | 0.43% |
| Line 2-15, Therapy Supplies | 262,139 | | 3.70% | 0.28% |
| Total Therapy Costs | \$3,483,412 | + | | 5.16% |

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| COST CENTER | LINE ITEM COST | PERCENTAGE OF COST CENTER | TREND FACTOR | WEIGHTED . TREND FACTOR |
|---|----------------------|---------------------------------|-----------------|-------------------------|
| Care Related Costs | | | | |
| Line 3-01, Salaries-Activities | \$9,640,243 | 16.20% | 5.20% | 0.84% |
| Line 3-02, Salaries-Assistant Director of Nursing | 889,264 | 1.49% | 5.20% | 0.08% |
| Line 3-03, Salaries-Director of Nursing | 5,852,824 | 9.83% | 5.20% | 0.51% |
| Line 3-04, Salaries-Pharmacy | 63,032 | 0.11% | 5.20% | 0.01% |
| Line 3-05, Salaries-Social Services | 10,009,885 | 16.82% | 5.20% | 0.87% |
| Line 3-06, FICA Taxes-Care Related | 1,278,410 | 2.15% | 5.20% | 0.11% |
| Line 3-07, Group Health-Care Related | 983,004 | 1.65% | 7.40% | 0.12% |
| Line 3-08, Pension Plan-Care Related | 659,818 | 1.11% | 5.20% | 0.06% |
| Line 3-09, Unemployment Taxes-Care Related | 100,344 | 0.17% | 3.70% | 0.01% |
| Line 3-10, Uniforms, Care Related | 66,775 | 0.11% | 2.40% | 0.00% |
| Line 3-11, Workmen's Comp-Care Related | 749,849 | 1.26% | 4.80% | 0.06% |
| Line 3-12, Allowable Barber & Beauty Expense | 24,342 | 0.04% | 3.70% | 0.00% |
| Line 3-13, Consultant Fees-Activities | 505,785 | 0.85% | 7.00% | 0.06% |
| Line 3-14, Consultant Fees-Medical Director | 2,621,571 | 4.40% | 7.00% | 0.31% |
| Line 3-15, Consultant Fees-Nursing | 499,246 | 0.84% | 7.00% | 0.06% |
| Line 3-16, Consultant Fees-Pharmacy | 428,735 | 0.72% | 7.00% | 0.05% |
| Line 3-17, Consultant-Fees-Social Worker | 70,034 | 0.12% | 7.00% | 0.01% |
| Line 3-18, Consultant Fees - Therapists | 879 | 0.00% | 7.00% | 0.00% |
| Line 3-19, Food-Raw | 20,753,255 | 34.86% | 1.30% | 0.45% |
| Line 3-20, Food-Supplements | 1,254,380 | 2,11% | 1.30% | 0.03% |
| Line 3-21, Supplies-Care Related | 2,424,418 | 4.07% | 3.70% | 0.15% |
| Line 3-22, Other Care Related Costs | 649,107 | 1.09% | 3.70% | 0.04% |
| Total Care Related Costs | \$59,525,200 | 100.00% | | 3.83% |

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| COST CENTER | LINE ITEM COST | PERCENTAGE OF COST CENTER | TREND FACTOR | WEIGHTED TREND FACTOR |
|---|----------------------|--|-----------------|-----------------------------|
| Administrative and Operating Costs | | | | |
| Line 4-01, Salaries-Administrator | \$5,898,135 | 4.75% | 5.20% | 0.25% |
| Line 4-02, Salaries, Assistant Administrator | 1,124,799 | 0.91% | 5.20% | 0.05% |
| Line 4-03, Salaries-Dietary | 17,561,263 | 14.13% | 5.20% | 0.73% |
| Line 4-04, Salaries-Housekeeping | 10,810,726 | 8.70% | 5.20% | 0.45% |
| Line 4-05, Salaries-Laundry | 3,602,464 | 2.90% | 5.20% | 0.15% |
| Line 4-06, Salaries-Maintenance | 4,874,089 | 3.92% | 5.20% | 0.20% |
| Line 4-07, Salaries-Medical Records | 2,325,109 | 1.87% | 5.20% | 0.10% |
| Line 4-08, Salaries-Other Administrative | 8,739,665 | 7.03% | 5.20% | 0.37% |
| Line 4-09, Salaries-Owner | 1,133,474 | 0.91% | 5.20% | 0.05% |
| Line 4-10, FICA Taxes-Admin. & Operating | 3,818,731 | 3.07% | 5.20% | 0.16% |
| Line 4-11, Group Health-Administrative | 2,401,964 | 1.93% | 7.40% | 0.14% |
| Line 4-12, Pension Plan-Administrative | 693,004 | 0.56% | 5.20% | 0.03% |
| Line 4-13, Unemployment Taxes-Admin. | 413,417 | 0.33% | 3.70% | 0.01% |
| Line 4-14, Uniforms-Administrative | 170,293 | 0.14% | 2.40% | 0.00% |
| Line 4-15, Workmen's Comp-Administrative | 2,598,911 | 2.09% | 4.80% | 0.10% |
| Line 4-16, Contract—Dietary | 2,131,277 | 1.72% | 3.70% | 0.06% |
| Line 4-17, Contract—Housekeeping | 183,139 | | 3.70% | 0.01% |
| Line 4-18, Contract-Laundry | 679,758 | | 3.70% | 0.02% |
| Line 4-19, Contract—Maintenance | 609,721 | | 3.70% | 0.02% |
| Line 4-20, Consultant Fees-Dietician | 417,944 | | 7.00% | 0.02% |
| Line 4-21, Consultant Fees-Medical Records | 408,950 | + | 7.00% | 0.02% |
| Line 4-22, Accounting Fees | 1,653,321 | | 7.00% | 0.09% |
| Line 4-23, Amortization Expense - Non-Capital | 39844 | | 3.70% | 0.00% |
| Line 4-24, Bank Service Charges | 37,306 | - - - - - | 3.70% | 0.00% |
| Line 4-25, Board of Directors Fees | 314,264 | | 3.70% | 0.01% |
| Line 4-25, Board of Directors Lees Line 4-26, Dietary Supplies | 1201082 | | 0.60% | 0.01% |
| Line 4-25, Dietary Supplies Line 4-27, Depreciation Expense | 139239 | | 3.60% | 0.00% |
| | 516,755 | | 3.70% | 0.02% |
| Line 4-28, Dues Line 4-29, Educational Seminars & Training | 409404 | | 3.70% | 0.01% |
| | 2,566,122 | | 0.60% | 0.01% |
| Line 4-30, Housekeeping Supplies | 1,272,280 | | 3.70% | 0.04% |
| Line 4-31, Insurance - Professional Liability | 176,081 | | 3.70% | 0.01% |
| Line 4-32, Interest Expense - Non-Capital | 1,133,535 | + | 3.70% | 0.03% |
| Line 4-33, Laundry Supplies | | · | 7.00% | 0.02% |
| Line 4-34, Legal Fees | 442,665 | | 1.30% | 0.02% |
| Line 4-35, Linen & Laundry Alternatives | 1,449,549 | | 3.70% | |
| Line 4-36, Miscellaneous | 3,330,589 | | | |
| Line 4-37, Management Fees & Home Office Costs | 12,551,828 | | 3.70% | 0.37% |
| Line 4-38, Office Supplies & Subscriptions | 2,402,302 | | 3.70% | 0.07% |
| Line 4-39, Postage | 259,360 | | 3.70% | 0.01% |
| Line 4-40, Repairs & Maintenance | 7,424,239 | | 1.60% | 0.10% |
| Line 4-41, Taxes, Other | 1707432 | | 3.70% | 0.05% |
| Line 4-42, Telephone & Communications | 1,229,364 | | 3.70% | 0.04% |
| Line 4-43, Travel | 589,199 | | 3.70% | 0.02% |
| Line 4-44, Utilities | 12,824,236 | | 2.30% | 0.24% |
| Total Administrative and Operating Costs | \$124,266,829 | 100.00% | | 4.21% |

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